ABB i-bus® KNX
Security Solutions with KNX
Security Terminal Product Information

Power and productivity
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Compact Security Solutions for the ABB i-bus® KNX – the New Security Terminals from ABB

The compact solution for security applications – the new Security Terminals.

The compact solution for security applications – the new Security Terminals. The new Security Terminal provides a compact security solution for KNX applications for detection and signalling of intrusion, personal attack and technical hazards. They are used as the interface between the security technology sensors and KNX.

Depending on the configuration, the devices feature 2, 4 or 8 inputs – so-called detector circuits or zones. They are used for monitoring connected passive detectors (e.g. magnetic contacts, glass break sensors, etc.) to the ABB i-bus® KNX as well as for connection of floating contacts in applications with enhanced security requirements.

Through the connection of security technology and KNX, the detectors employed can, in addition to the security functions, also be used for heating control (e.g. window contact signal for control of the heating valve) or lighting control (e.g. central switch off of the lighting when the alarm logic is set).

The Security Terminals can be used as autonomous systems with the newly integrated alarm logic, in conjunction with the Security Module SCM/S or with an Intrusion Alarm Panel L240 with KNX Interface XS/S.

The new application program offers several functions for security applications, such as

- Direct and delayed setting
- Internal setting with occupancy and external setting when absent
- Setting of the connected detector types
- Reset input and setting input
- Detector monitoring
- Zones (detector circuits) can be switched off
- Different types of alarms
- Setting for freely programmable relay outputs, e.g. for direct control of signalling devices

Application

Compact security solution for KNX applications for detection and signalling of intrusion, personal attack and technical dangers

Monitored connection of security technology sensors

Direct control of signalling devices

Benefits

Simultaneous usage of the security technology for supporting building management

Individual operation and display options for the security functions via KNX

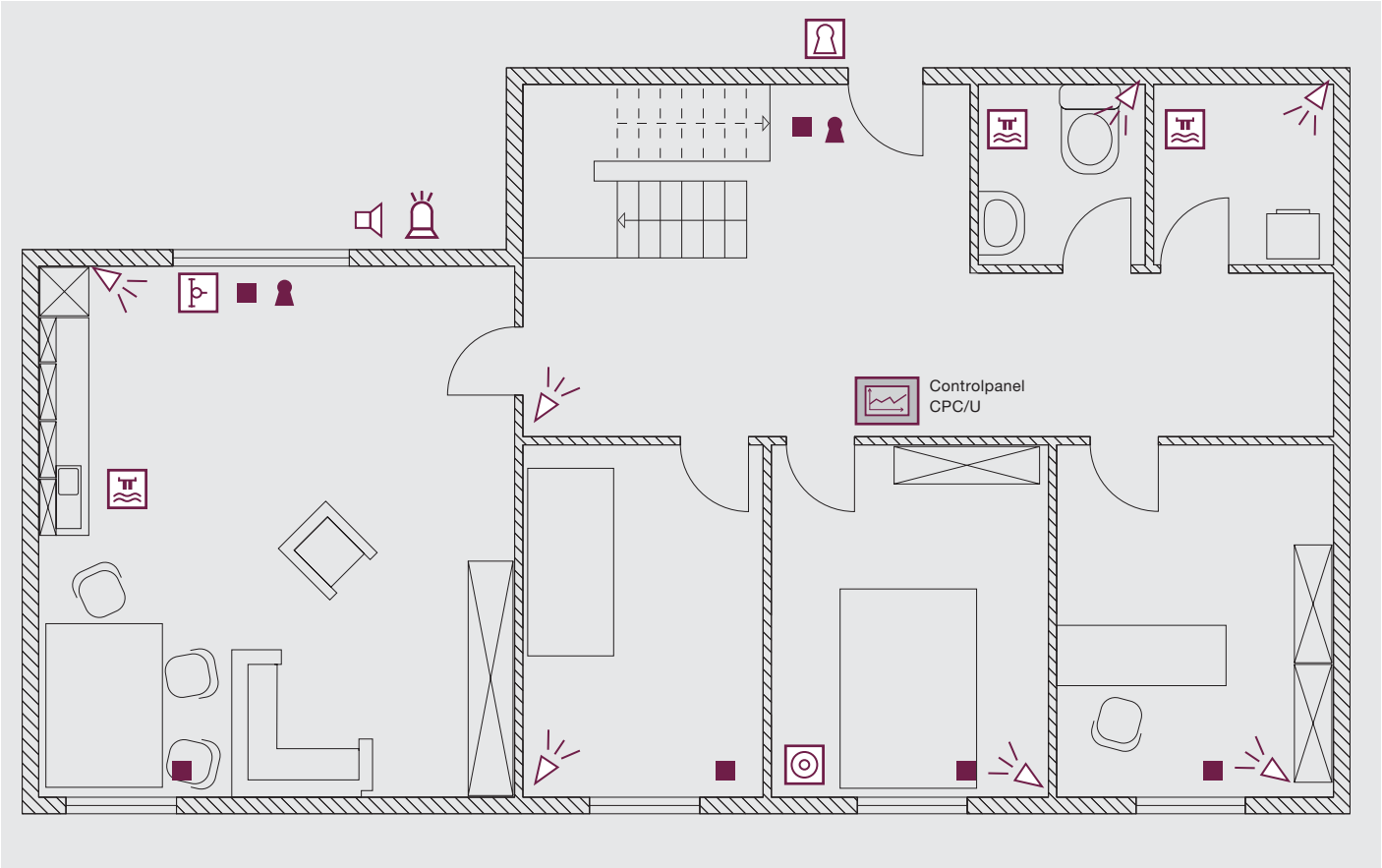
Event-driven scene control

Product

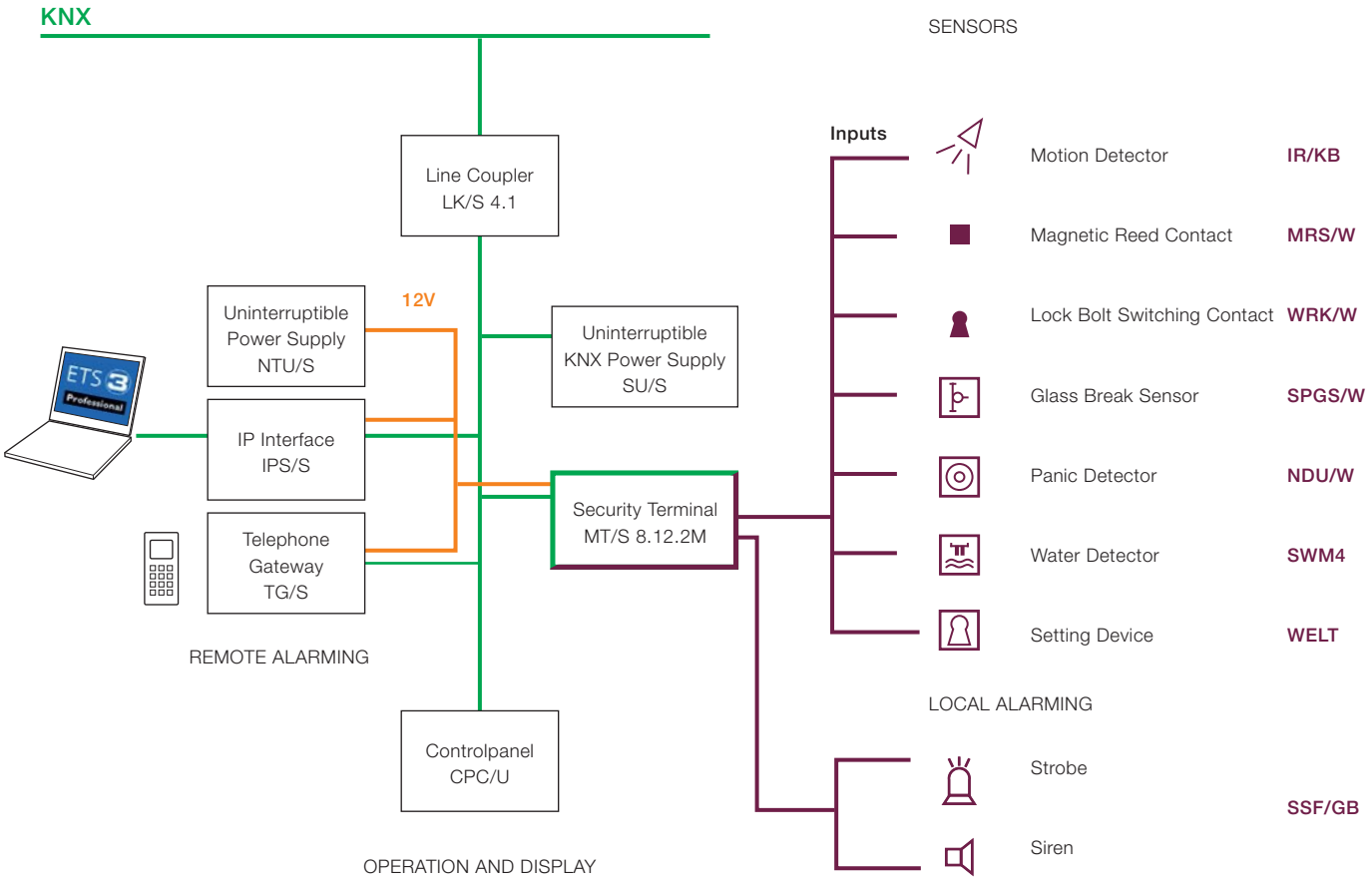
Security Terminal, 8-fold, MDRC, MT/S 8.12.2M

Security Terminal, 4-fold, MDRC, MT/S 4.12.2M

Security Terminal, 2-fold, FM, MT/U 2.12.2



Project example for protection of a detatched house



Topology example with Security Terminal MT/S 8.12.2M

Areas of Application of Security Technology and Additional Benefits through the Integration in the KNX Intelligent Installation System

Peripheral monitoring

What is monitored	What is the monitored event	What is used for monitoring	Note
Doors and windows	Opening	Magnetic contacts	Drill hole or flush mounting in or on the window frames
	Glass break	Glass break sensor	Mounted on the glass surface

Additional benefits via KNX with an unset system:

Switch off of air-conditioning when a window is open

Closing of a heating valve when a window is open

Interior monitoring

What is monitored	What is the monitored event	What is used for monitoring	Note
Rooms and halls	Detection of motion	Motion detectors	Observe sources of interference! Heating and air-conditioning (temperature differences)

Additional benefits via KNX with an unset system:

Switch on of illumination when a motion is detected

Lock monitoring

What is monitored	What is the monitored event	What is used for monitoring	Note
Doors	Locking of the door	Lock bolt switching contact	Installation in the door strike plate
Windows	Closing of the window	Blocking bolt	Installation in the window surround

Technical monitoring

What is monitored	What is used for monitoring	Note
Water leak	Water detector	
Gas leak	Gas detector	Only in conjunction with an uninterruptible power supply
Occurance of smoke	Smoke detector	Only in conjunction with an uninterruptible power supply

Additional benefits via KNX with a technical alarm:

Switch off of the power circuits

Setting device

What is performed	How is setting/unsetting implemented	Note
Activation/deactivation of the peripheral and interior monitoring	SafeKey Wall Reader (by chip key insertion or code entry)	Direct setting
	Controlpanel (via code input)	Delayed setting

Additional benefits via KNX with system setting:	
	Switch off of the power circuits
	Lowering of blinds
	Switch off of illumination
	Reduction in cooling power (stand-by operation)
	Reduction in heating power (stand-by operation)

KNX operation and display device

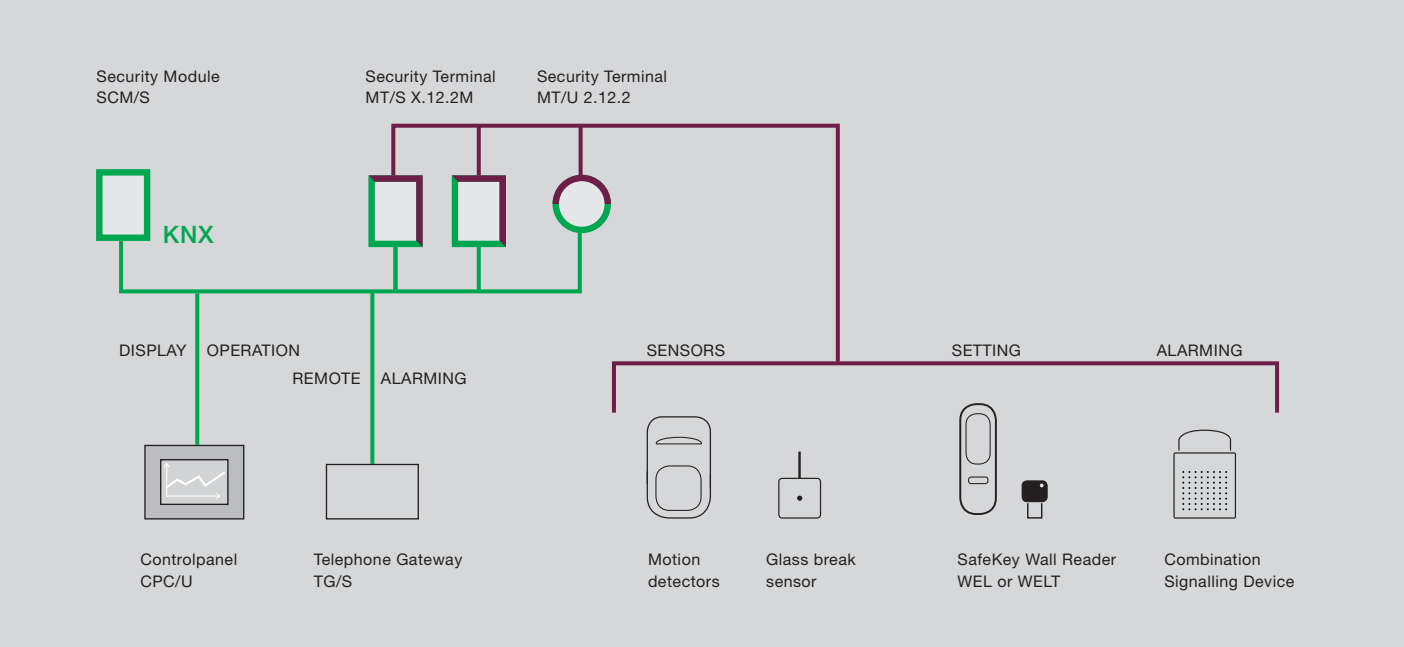
What is performed	What is used for display	Note
Operation and displays	Controlpanel	

Alarming

Type of alarming	What is used for alarming	Note
Internal alarming with occupancy	Internal siren, Controlpanel	
External alarming with absence	External siren with/without strobe light	Height at least 3 m
Remote alarming (silent alarm)	Telephone Gateway TG/S	A/B cable
Panic alarm	Panic detector	

Additional benefits via KNX on alarm:	
	Switch on of the illumination
	Raising of the blinds, opening of shutters

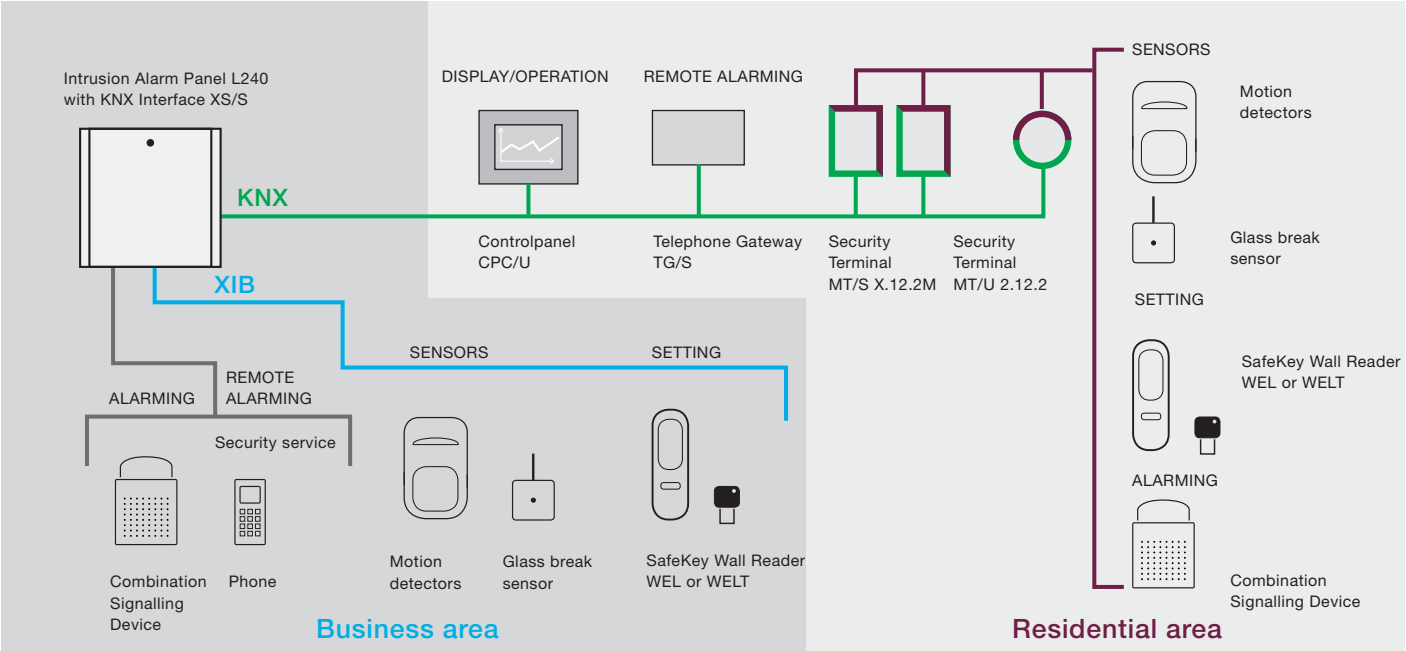
Scalable Security Solution
with Security Module and Security Terminal



Example of an expansion using Security Module SCM/S

The new Security Terminal provides a compact solution with 2, 4 or 8 detector inputs. Should a project require more detector circuits (zones), an extended security solution can be implemented by a combination of the Security Terminal and the Security Module SCM/S on the ABB i-bus® KNX.
The Security Module in this case undertakes the detector evaluation, setting as well as alarming functions and controls all the security functions in the building. It can evaluate up to 64 detector circuits. The Security Terminal in this combination operates as a zone terminal, which converts the sensor signals to bus telegrams and provides them to the Security Module for evaluation on the KNX.

Professional Security Solution with KNX Interface XS/S 1.1 for L240 Intrusion Alarm Panel



Example of an expansion of the Intrusion Alarm Panel L240 with a KNX Interface XS/S

The ABB Intrusion Alarm Panel L240 is used in projects where security zones with VdS approval are to be implemented. It can be integrated into the KNX intelligent installation system via the KNX Interface XS/S and thus transfers detailed information concerning the state of the system to the KNX to support building control. On non-VdS approved systems, the KNX interface even facilitates bi-directional communication between the KNX and the Intrusion Alarm Panel L240. Each individual input of the 80 zone inputs on the L240 can thus be optionally allocated to a detector on the L240 or a KNX detector on the KNX bus system.

The detectors on the KNX are then connected using new Security Terminals.

Using this system, a project can be optimally implemented, for example, where a retail business occupies the ground floor and a residential area occupies the upper floors. The illumination, heating and air-conditioning or other control functions can be implemented via KNX in both in the retail business as well as the residential areas. Security is provided in the retail business by the Intrusion Alarm Panel L240 with VdS approval, whereas an adequate security solution for the residential area is provided using Security Terminals. The L240 is also according to EN 50131-1.

Contact

www.abb.com/knx

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